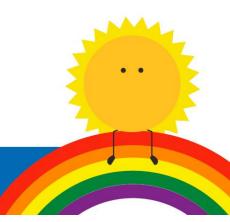


Patient information

# **Asthma & Wheeze**

How to keep your child well





# Using Salbutamol (blue inhaler) to treat wheeze at home

When your child is wheezy it is important to use the blue inhaler to treat their symptoms. This flow chart can guide treatment during an asthma attack, and can help you reduce treatment safely as your child recovers. It is important to assess your child's symptoms regularly and at least four hourly to be sure they are getting better. This is particularly important at night and first thing in the morning.



#### Assess your child

Are they breathless or wheezy?

Do they have increased work of breathing?



#### Yes?

- Give <u>2 puffs</u> one at a time using a spacer.
- Review their response after 5-10 minutes.
- If not improving give another <u>2 puffs</u> and reassess after a further 5-10 minutes.
- If still not improving, repeat up to a total dose of 10 puffs and reassess in 5-10 minutes.
- · They do not need their blue inhaler.
- Continue to review them at least every 4 hours for the next 12 hours.
- Children who are improving and look well should still be checked regularly but don't have to be woken up.



#### Reassess your child

Are you still concerned about your child's breathing?



#### Yes?

- Give up to another <u>10 puffs</u> of blue inhaler one at a time using a spacer and then
- SEEK URGENT HELP!
- Call 999 or attend the Emergency Department
- Please document your assessments and salbutamol treatment in the log on the next page.
- Bring the log to any medical review.

- At their most unwell your child might need the blue inhaler as often as every 4 hours.
- Needing it <u>less often</u> is a sign that your child is getting better.
- Needing it more often may mean they need urgent medical help: Call 111, see your GP, or go the emergency department if you are worried.
- Call 999 if you think your child is very unwell.

If you cannot hear a wheeze, an increase in your child / young person's work of breathing can also be a useful sign of airway narrowing. Scan the QR code for an example

or visit: https://tinyurl.com/breathlesschild

# Record of symptoms and inhaler use:

			Number of puffs
Date	Time	Any symptoms?	given
It's been 1 day since discharge from hospital -the number of puffs you are needing to give should be decreasing. If you are still giving 10 puffs 4 hourly please return to the Emergency department.			
It's been 2 days since discharge from hospital - The number of puffs and how often they are needed should be decreasing. If not contact your GP, 111 or go to the Emergency department.			
Are you happy that your child / young person is getting back to normal or are they still			

This is designed for use while recovering from a wheeze attack. You can also record treatment when you haven't been to hospital. You might want to show this to your doctor or nurse.

## How to take an inhaler with a spacer

Scan these QR codes with a smartphone camera, or look at the link below to see inhaler technique with mask and mouthpiece spacers:





- 1. Shake the inhaler and remove cap.
- **2.** Fit the inhaler into the opening at the end of the spacer.
- **3.** Place the mask over the child's face or mouthpiece in their mouth, ensuring a good seal (most children aged over 3 years should be able to manage without a mask).
- **4.** Press the inhaler once and allow the child to take 5 slow breaths

or

slowly count to 10 whilst they breathe through the spacer.

Remove the inhaler and shake it. Wait 1 minute before giving a second puff

Repeat steps 1-5 if more puffs are needed. Plastic spacers should be washed before being used for the first time and then monthly according to manufacturer's guidelines.



If your inhaler doesn't look like the one in the photo above, or it doesn't seem to work with a spacer, you should check with your doctor or nurse that it is OK for your child. <a href="www.asthma.org.uk">www.asthma.org.uk</a> have videos showing how to use your inhaler.

# Videos: using a spacer in different languages

Scan this QR code with a smartphone to find guidance in your language.
There are videos for checking your child's breathing, inhaler technique and advice.



https://tinyurl.com/NELasthma

আপনার ভাষায় কিছু নির্দেশিকা খুঁজে পেতে একটি স্মার্টফোন দিয়ে কোড স্ক্যান করুন: এটি আপনাকে নর্থ ইস্ট লন্ডন অ্যাজমা নার্সেসের ইউটিউব চ্যানেলে নিয়ে যাবে। আপনার সন্তানের শ্বাস-প্রশ্বাস পরীক্ষা, ইনহেলার কৌশল এবং ঘ্রাণ সম্পর্কে পরামর্শের জন্য ভিডিও রয়েছে।

Kendi dilinizde rehberlik bulmak için kodu bir akıllı telefonla tarayın: Sizi Kuzey Doğu Londra Astım Hemşireleri'nin YouTube kanalına götürecektir. Çocuğunuzun solunumunu, inhaler tekniğini kontrol etmek için videolar ve hırıltı hakkında tavsiyeler var.

اپنی زبان میں کچھ رہنمائی حاصل کرنے کے لیے اسمارٹ فون سے کوڈ اسکین کریں :یہ آپ کو نارتھ ایسٹ لندن دمہ نرسوں کے یوٹیوب چینل پر لے جائے گا۔ آپ کے بچے کی سانس لینے، انہیلر تکنیک اور گھرگھراہٹ کے بارے میں مشورہ کے لیے ویڈیوز موجود ہیں۔

Nuskaitykite kodą išmaniuoju telefonu, kad rastumėte patarimų savo kalba: Jis nuves jus į North East London Asthma Nurses "YouTube" kanalą. Yra vaizdo įrašų, kaip patikrinti jūsų vaiko kvėpavimą, inhaliatoriaus techniką ir patarimus dėl švokštimo.

# **Asthma friendly schools**

Is your school asthma-friendly? The school should:

- Know you have asthma and have a copy of your asthma / wheeze plan
- Know where your emergency inhaler and spacer are, and how to use them.
- Know who to tell if they are worried about your child
- Know when it's an emergency



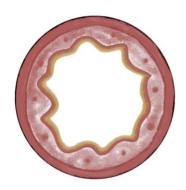




#### What is wheeze?

Wheeze is one of the main symptoms of asthma, but it also happens in other conditions that are not asthma. It can happen at any age. It is whistling sound caused by narrowing of the airways (breathing tubes).

This can sometimes only be heard through a **stethoscope**. It has many causes including viral infections. If you cannot hear a wheeze, noticing that your child is working hard to breathe can be a useful sign of airway narrowing.



#### Well-controlled asthma

Having asthma or wheeze doesn't mean your breathing will always be a problem. If you use your medicines as prescribed you can breathe easily all the time.



## **Poorly-controlled asthma**

When things are not under control, the breathing tubes become inflamed (red, sore, swollen and sensitive). They will also make more mucus and twitch more, meaning you might cough.



#### Asthma attack

This shows the airway of someone having an attack. The inside of the tube is so red, sore and swollen that air gets trapped, and can't get in and out easily. Air will squeeze through, making a wheezing (whistling) sound. There is much more mucus than before which adds to the feeling of chest tightness.



## How, why and where the medicines work:

The controller inhaler is LIFE SAVING. It only works if used every day:



It is SAFE, stops you needing your blue rescue inhaler, and keeps you well.

- It makes the blue rescue inhaler work better in an asthma attack
- It stops your asthma triggers causing an attack
- It stops you needing steroid tablets or going to hospital
- It goes straight to the lungs where it's needed
- It doesn't work fast but it works well use it regularly

The **blue inhaler** is a **RESCUE** treatment, only use it if you have symptoms:



# REGULARLY OVERUSING:

Shows poor asthma control if used more than twice a week.

Can hide symptoms that show your asthma is worse

Can make the salbutamol (blue inhaler) work less well

Can cause side effects like a fast heart rate and shakiness.

### IN AN ASTHMA ATTACK:

Use **UP TO 6 puffs every 4 hours** for up to 24 hours if needed

Needing more is an emergency.

You must follow your wheeze plan and seek help

Repeated high doses (6-10 puffs) need hospital monitoring

#### IN RECOVERY:

Use the blue inhaler up to 6 puffs as needed until back to normal. Needing it 4 hourly or more means the asthma attack is ongoing – seek medical attention.



#### The Preventer or Controller Inhaler

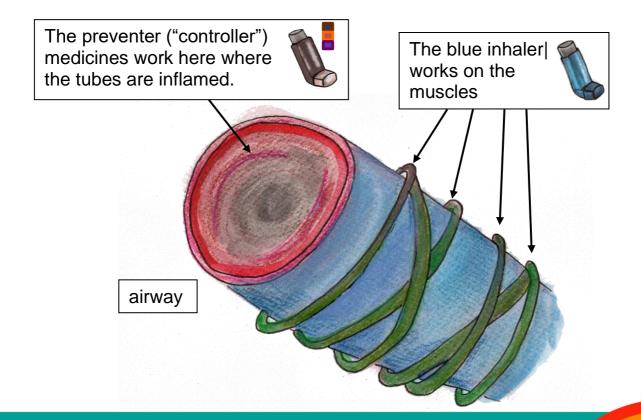
This inhaler (usually brown, purple or orange) settles down the inflammation in the airways. It works slowly but this is the treatment that deals with the main problem. This is why we MUST give it, with a spacer, every day, even when we are well.

#### The Rescue or Reliever Inhaler

This inhaler is usually blue. It works on the muscles wrapped around the breathing tubes. These are like elastic bands; they are usually relaxed, but during an attack they can tighten and squeeze the airways, making it hard to breathe. The air squeezing through makes a whistling noise called a wheeze.

Wheeze is a sound that comes from the lower airways when we breathe out through narrowed airways.

The inhaler tells the muscles to relax, which opens the tubes and allows air to move through normally. This inhaler works fast when it is needed, but doesn't help prevent attacks like the controller does.



# **Triggers**

Common triggers include things like weather (this can be hot, cold, dry, humid, thunderstorms – anything, really...). For some people with asthma changes in weather patterns are a bigger problem than the weather itself.

Other triggers include food allergies, dust, animal fur, feathers, pollen, exercise, reflux, emotions, hormonal cycles, colds and other viruses. These are different for everyone. It is important to know your triggers and how to avoid or minimise them.

Environmental irritants affect everyone's airways, but they can be especially tricky for people with asthma. These irritants include tobacco smoke, e-cigarettes, air pollution, damp and mould. Air Pollution is a trigger we are learning more about every day. Vehicle exhausts are a major cause of air pollution and can affect passengers as well as pedestrians.

## Tips to reduce the impact of air pollution:

Use quieter roads and paths to keep away from traffic (this is especially important on the way to and from school if possible). Travel outside of rush hour where possible. Encourage the whole family to walk, cycle or scoot more - air pollution can actually be higher inside a car than outside. It also helps reduce pollution for everyone else.

You (or your grown-up) can sign up for safe air pollution alerts to come to a mobile phone **www.cleanairhub.org.uk** Try to use fragrance-free and low-chemical cleaning products. These will help your indoor environment.

# **Smoking**

We know that cigarette smoke is bad for our lungs. For help quitting smoking, go to <a href="www.smokefree.org">www.smokefree.org</a> or speak to your GP who will be happy to help.



Scan the QR code to visit the site

https://www.cleanairhub .org.uk/tower-hamlets

for tips, and to sign up

to alerts

# **The Digital Health Passport**

The Digital Health Passport is a mobile app for children, young people and their grown-ups.



### Your asthma care at your fingertips:

- Carry your asthma plan with you
- Know what to do in an attack
- Remind yourself to take your medicines
- Get alerts for pollen and pollution where you are.

"It's fantastic- really cool" - Robert, 12, Digital Health Passport user

"We are always trying to encourage Alice to look after her asthma herself and it helps her to be independent.....really great as she has been discharged from hospital and the app helps her monitor her asthma and she lets us know how she is getting on" - Susan, Digital Health Passport User Alice's Mum

"This could save a life" - Anne-Marie, Asthma nurse, Barts Health

#### Download it here:

Scan the QR code to download in the App store & Google Play









TinyMedicalApps.



## Assessing difficulty with breathing

It is important to know how to tell your child is having trouble breathing. There are a few signs that we can spot in a child that is struggling:

- **Recession** this is when you can see the skin pulling in either in between or under the ribs. Sometimes this might be in the middle of the chest, and this is a worrying sign.
- Tracheal Tug this is when the neck pulls in over the windpipe.
- Babies might also bob their heads and flare their nostrils wide.
- Can they speak or eat? It is important to notice whether your child is able to speak in their usual way- can they speak in full sentences, or are they just using single words- or not speaking at all?

## **Peak Expiratory Flow ("Peak Flow")**

When your child is able to do the technique, we might try using Peak Flow.

Peak flow is a measurement of how **fast** air moves through the airways (breathing tubes). It is measured in litres per minute (I/min). You can get different kinds of peak flow meter, but you will always get a number as a result. It is helpful to know what your usual and best numbers are.

We often use peak flow as a test to measure **how narrow the airways are**. We know that when someone with asthma or wheeze comes into contact with a trigger it can make the muscles around the airways squeeze them tight. If airways are already inflamed they can be quite twitchy and tight already.

We measure peak flow against your height, to see what we expect you to blow. If you know your personal best, you can use peak flow at home to tell if you need your blue inhaler.

One type of peak flow meter.



## Large print and other languages

This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, upon request. For more information, speak to your clinical team.

এই তথ্যগুলো সহজে পড়া যায় অথবা বৃহৎ প্রিন্টের মত বিকল্প ফরম্যাটে পাওয়া যাবে, এবং অনুরোধে অন্য ভাষায়ও পাওয়া যেতে পারে। আরো তথ্যের জন্য আপনার ক্লিনিক্যাল টিমের সাথে কথা বলুন।

Na żądanie te informacje mogą zostać udostępnione w innych formatach, takich jak zapis większą czcionką lub łatwą do czytania, a także w innych językach. Aby uzyskać więcej informacji, porozmawiaj ze swoim zespołem specjalistów.

Macluumaadkaan waxaa loo heli karaa qaab kale, sida ugu akhrinta ugu fudud, ama far waa weyn, waxana laga yabaa in lagu heli luuqaado Kale, haddii la codsado. Wixii macluumaad dheeraad ah, kala hadal kooxda xarunta caafimaadka.

Bu bilgi, kolay okunurluk veya büyük baskılar gibi alternatif biçimlerde sunulabilir, ve talep üzerine Alternatif Dillerde sunulabilir. Daha fazla bilgi için klinik ekibinizle irtibata geçin.

یہ معلومات متبادل فارمیٹس میں دستیاب کی جا سکتی ہیں، جیسا کہ پڑھنے میں آسان یا بڑا پرنٹ اور درخواست پر متبادل زبانوں میں بھی دستیاب ہو سکتی ہیں۔ مزید معلومات کے لیے، اپنی کلینکل ٹیم سے بات کریں'۔

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Tweet us @NHSBartsHealth
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# **Patient Advice and Liaison Service (PALS)**

Please contact us if you need general information or advice about Trust services: <a href="https://www.bartshealth.nhs.uk/pals">www.bartshealth.nhs.uk/pals</a>

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All our patient information leaflets are reviewed every three years.

